AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus comprising:

[[a]] an observability buffer having a trigger, wherein the observability buffer is integrated on a first component which is capable of being communicably coupled with a second component ~~further coupled with~~ via a simultaneous bi-directional (SBD) ~~memory bus~~ interface having ternary logic levels, wherein the observability buffer is configured to un-intrusively observe and echo one or more of a plurality of signals transmitted between the first component and the second component based on ~~the trigger to facilitate one or more of un-intrusively observing, reading, and echoing of one or more of a plurality of signals transmitted on the SBD memory bus, wherein the trigger to instruct the buffer via~~ one or more of a control signal-based indication, an address signal-based indication, and a time-based indication; and

~~a diagnostic device coupled with the buffer, the diagnostic device to facilitate one or more of detecting, accessing, and reading of the plurality of echoed signals; and~~

an observability port on the first component capable of receiving the echoed signals from the observability buffer and providing a diagnostic device access to the echoed signals. ~~coupled with the buffer, the observability port to receive the plurality of echoed signals, wherein the observability port includes a logic observability port.~~

2-5. (Cancelled)

6. (Currently Amended) A method comprising:

transmitting a plurality of signals between a first component and a second component on a simultaneous bi-directional (SBD) ~~memory bus~~ interface having ternary logic ~~levels;~~ levels, wherein the first component includes an observability buffer integrated on the first component;

un-intrusively observing ~~observing, reading and/or echoing of~~ one or more of the plurality of signals transmitted on the SBD interface; and~~memory bus via a trigger, the SBD bus coupled with a component further coupled with a buffer having the trigger, wherein the trigger to instruct the buffer via one or more of a control signal based indication, an address signal based indication, and a time based indication;~~

~~detecting, accessing, and/or reading of the plurality of echoed signals via a diagnostic device, the diagnostic device coupled with the buffer; and~~

~~receiving the plurality of echoed signals via an observability port, wherein the observability port includes a logic observability port.~~

echoing the one or more of the plurality of observed signals to an observability port integrated on the first device based on a received trigger signal, wherein the observability port is capable of interfacing with a diagnostic device, relaying the echoed signals to the diagnostic device, and includes a logic observability port.

7-13. (Cancelled)

14. (Currently Amended) A system comprising:

a memory communicably coupled with a ~~microprocessor;~~ microprocessor, wherein the microprocessor includes an integrated observability buffer;

a first component communicably coupled to the microprocessor through a simultaneous bi-directional (SBD) interface having ternary logic levels;

~~the microprocessor coupled with a buffer having a trigger;~~

wherein the observability buffer ~~coupled with a component further coupled with a simultaneous bi-directional (SBD) memory bus having ternary logic levels, the trigger to facilitate one or more of~~ un-intrusively ~~observing, reading, and echoing~~ observes and echoes at least one of a plurality of signals transmitted on the SBD ~~memory bus,~~ interface between the first component and the microprocessor; ~~wherein the trigger to instruct the buffer via one or more of a control signal-based indication, an address signal-based indication, and a time-based indication;~~

an observability port communicably coupled with the observability buffer, the observability port to receive the echoed signals, wherein the observability port includes a logic observability port; and

a diagnostic device communicably coupled with the observability ~~buffer,~~ buffer by interfacing with the observability port, wherein the diagnostic device is capable of ~~to facilitate~~ one or more of detecting, accessing, and reading of the ~~plurality of~~ echoed signals. ~~signals; and~~

~~an observability port coupled with the buffer, the observability port to receive the plurality of echoed signals, wherein the observability port includes a logic observability port.~~

15-22 (Cancelled)

23. (Previously Presented) The system of claim 14, wherein the diagnostic device comprises one or more of a logic analyzer and a bus analyzer, the diagnostic

device coupled to an observability bus, the observability bus further coupled to the observability port.

24. (Previously Presented) The system of claim 14, wherein the plurality of signals are communicated via a wireless communication.

25. (Currently Amended) The system of claim 14, wherein the plurality of [[echo]] echoed signals comprise frequencies between a minimum frequency of 5 gigahertz (GHz) ~~GHz~~ and a maximum frequency of 500 gigahertz (GHz). ~~GHz.~~

26. (Previously Presented) The apparatus of claim 1, wherein the diagnostic device comprises one or more of a logic analyzer and a bus analyzer, the diagnostic device coupled to an observability bus, the observability bus further coupled to the observability port.

27. (Previously Presented) The apparatus of claim 1, wherein the plurality of signals are communicated via a wireless communication.

28. (Currently Amended) The apparatus of claim 1, wherein the ~~plurality of echo~~ echoed signals comprise frequencies between a minimum frequency of 5 gigahertz (GHz) ~~GHz~~ and a maximum frequency of 500 gigahertz (GHz). ~~GHz.~~

29. (Previously Presented) The method of claim 6, wherein the diagnostic device comprises one or more of a logic analyzer and a bus analyzer, the diagnostic device coupled to an observability bus, the observability bus further coupled to the observability port.

30. (Previously Presented) The method of claim 6, further comprising communicating the plurality of signals via a wireless communication.

31. (Currently Amended) The method of claim 6, wherein the ~~plurality of echo~~ echoed signals comprise frequencies between a minimum frequency of 5

gigahertz (GHz) ~~GHz~~ and a maximum frequency of 500 gigahertz (GHz). ~~GHz.~~

32–35 (Cancelled)